

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 15. (Canceled).

16. (Currently Amended) A layer system, comprising:
an etched layer, whereby the etched layer is a silicon layer; and
a passivation layer applied at least regionally to a surface of the silicon layer,
wherein:

the passivation layer includes a first, at least largely, inorganic partial
layer and a second partial layer, and

the second partial layer is made of an organic compound, wherein the
organic compound includes a silane corresponding to one of an organic fluorine
silane, an organic fluorochlorine silane, and a siloxane.

17. (Previously Presented) The layer system as recited in Claim 16, wherein
the organic compound contains a halogen.

Claim 18. (Canceled).

19. (Currently Amended) A layer system, comprising:
an etched layer, whereby the etched layer is a silicon layer; and
a passivation layer applied at least regionally to a surface of the silicon layer,
wherein:

the passivation layer includes a first, at least largely, inorganic partial
layer and a second partial layer, and

the second partial layer is made of an organic compound,

wherein the organic compound has the general formula $R_a-R_b-Si(X)_{3-n}-(R_c)_n$,

R_a being a perfluorinated polyether or a perfluorinated alkyl group having 1 to 16
carbon atoms, especially 6 to 12 carbon atoms, R_b and R_c being an alkyl group, and

X being a halogen, an acetoxy group or an alkoxy group, and n having a value of 0 to 2.

20. (Previously Presented) The layer system as recited in Claim 16, wherein the first partial layer is at least largely composed of an oxide layer having a silicon oxide.

21. (Previously Presented) The layer system as recited in Claim 16, wherein the first partial layer has a thickness of 1 nm to 100 nm.

22. (Currently Amended) The layer system as recited in Claim 16, wherein the first partial layer has a thickness of 1 nm to 20 nm.

23. (Previously Presented) The layer system as recited in Claim 16, wherein the first partial layer is directly applied one of (a) to the silicon layer and (b) on a layer of silicon oxide situated on the silicon layer.

24. (Previously Presented) The layer system as recited in one Claim 16, wherein the second partial layer is a self-assembled monolayer.

25. (Previously Presented) The layer system as recited in Claim 16, wherein the second partial layer has a thickness of 0.5 nm to 30 nm.

26. (Previously Presented) The layer system as recited in Claim 16, wherein the second partial layer has a thickness of 5 nm to 20 nm.

27. (Previously Presented) The layer system as recited in Claim 16, wherein the passivation layer protects the silicon layer with respect to an etch attack by a gaseous halogen fluoride including one of ClF_3 and BrF_3 .

28. (Previously Presented) The layer system as recited in Claim 16, wherein the passivation layer is free of micro-scale or nano-scale channels which are permeable for a gas including one of ClF_3 , BrF_3 and a vapor.

Claims 29.-32. (Cancelled).